

INTRODUCTION

A yurveda, the science of life emphasizes on three basic pursuits for healthy longevity of human beings, viz., *Praneshana* (desire to live), *Dhaneshana* (desire to earn) and *Paralokeshana* (desire to attain happiness after life). For these one has to follow four *Chaturtartha* e.g. *Dharma* (moral values), *Artha* (prosperity), *Kama* (pleasure) and *Moksha* (liberation). First by succeeding personal ethics and economic policies, one has to work for the development of constituency and after that the endure object of human being comes i.e. to get happy and healthy life for liberation. Based upon these fundaments, Rasashastra has certain objectives as follows:

धर्मार्थमुपभोगानां नष्टराज्यविवृद्धये। आयुर्योवनलाभार्थमुक्त्यर्थं च मुमुक्षूणाम्॥

(Rsu.Kh.1/1/5)

- 1. Attainment of Purushartha Chatustya
- 2. Luxuries and desires
- 3. Getting rulership on realm and prosperity again
- 4. Gain healthy and long life

Our sages came to know that these objectives can merely be fulfilled by attainment of healthy and long life because there is no certainty in wealth, pleasure and all the materialistic things. This also causes of impediments in salvation. Only *Pindasthairya* (permanency of individual) is eternal

and one should maintain this by *Hatha Yoga Sadhana* and internal administration of *Parada* (mercury). *Parada* has phenomenal properties and core importance in attaining immortal body.

Rasashastra means the "science of mercury". Lord Shiva is the preacher of this mystical science. In relation to above objectives, Rasashastra has two main aims i.e. Dehasiddhi (healthy and long life) and Dhatusiddhi (converting lower metals into higher metal). Mercury has miraculous properties and important place in various kinds of processing called Samskara for the purpose of converting lower metals into higher metal in alchemy. It is used for the incineration of metals and minerals for the elimination of their toxic components and generates therapeutic value. In the end product generally known as Bhasma usable for the body hence they can be used as Rasayana.

पूर्वंलोहे परीक्षेत ततोदेहे प्रयोजयेत्।

(Rnv.7/64)

After 7th century, some scholars of Rasashastra were opined that before administration of processed mercury into body, it is advisable to be examined on metals by doing various alchemical procedures. The reason behind this, if mercury is adequate in this transmutation of metals, then it is surely suitable in the promotion of positive health of individuals.



Siddha Nagarjuna has given the significance contributions in the field of Rasashastra and was expert in many alchemical procedures for transmutation of metals. By quoting this verse, he announced that 'he shall make the entire world free from poverty by metamorphoses in mercury'.

सिद्धे रसे करिष्यामि निर्दारिक्र्यगदं जगत्।

(R.R.S.1/31)

This citation shows his mastery in alchemical achievements. For this, mercury has to undergo 18 *Samskara* of *Parada* (unique processes on mercury). It is the art of making tremendous wealth and effort of attaining *Dehasiddhi*. Both of these are not an easy task. To achieve these highest goals, the sages did many experiments and found many methods referred to as *Samskara* and recorded for the benefits of humanity.

यथा रसस्तथा ह्यात्मा यथा ह्यात्मा तथा रसः। आत्मविद् रसविञ्चेव द्वाविमौ सूक्ष्मदर्शिनौ॥

(Rsu.Kh.1/15/50)

This stanza shows the spiritual importance of *Parada* in Rasashastra. *Rasopanishatkara* equates *Rasa* and *Atma*. *Atma* is eternal and beyond contemplation. *Parada* (*Rasa*) after *Vedha Samskara* achieves the same eminence. So, both *Rasavid* and *Atmavid* are *Sukshmadarshi*.

काष्ठौषध्योनागे नागं वङ्गेऽथवङ्गमपि शुल्बे। शुल्बं तारे तारं कनके कनकं च लीयते सूते॥

(R.H.T.1/12)

Acharya Bhagvatpadacharyaji stated about the speciality of Parada by quoting that all Panchabhautika Dravya are assimilated in Parada.

मृदःकोटीगुणं स्वर्णंस्वर्णात्कोटीगुणं मणिः। मणेः कोटीगुणो बाणोबाणात्कोटीगुणोरसः॥ रसात्परतरं किञ्चिन्नभूतो न भविष्यति॥

(Com. on R.S. - Parada Prakarana)

This stanza shows the supremacy of *Parada* among all precious things in the world. *Svarna* is best among all metals and minerals, *Mani* is superior to *Svarna* and *Bana* (*Indravajra*) is superior to *Mani*. However *Parada* is paramount.

After discussing the philosophical and spiritual importance of *Parada* in *Dehavada* and *Lohavada*, let us understand the derivation, etymology and definition of *Rasa*.

Derivation

''रसगतौधातु''॥(Su.Su.14/13)

Rasa word is derived from the word "रस" which means movement.

Etymology

रसरूपिणीतिरसः पारद्स्तत्स्वरूपं यस्याः सा। (R.H.T.1/1)

Rasa or Parada stays in Rasa Svarupa (liquid state).

DEFINITION

Rasa

रसनात् सर्वधातुनां रसइत्यभिधीयते। जरारुऽमृत्युनाशाय रस्यते वा रसो मतः॥

(R.R.S.1/77)

Mercury can liquefy all the metals, so it is called *Rasa*. Mercury is liquid in nature at room temperature. It combines very easily with other elements and forms stable compounds.

IMPORTANCE OF RASAUSHADHI

Rasashastra is a very important branch of Ayurveda which deals with the knowledge of metals and minerals and manufacturing medicines from these *Rasa Dravya*. Our *Acharya* has mentioned the supremacy of *Rasa Chikitsa* from all the sciences at many places.



रसविद्या परा विद्या त्रैलोक्येऽपि सुदुर्ल्लभा। भुक्तिमुक्तिकरी यस्मात् तस्माद्देया गुणान्वितैः॥

(Rnv.1/46)

Rasa Chikitsa helps in accomplishing the two main aims of Ayurveda i.e. "स्वस्थस्य स्वास्थ्यरक्षणम्" and "आतुरस्य विकारप्रशमनम्"

Generally the patient who suffers from diseases expects three things from any branch of treatment:

- 1. To recover from the disease as soon as possible.
- 2. To take minimum medicine.
- 3. To remain healthy for a long time.

Rasaushadhi which is prepared by using mercury and other related drugs is highly effective and has capacity to aforesaid these three expectations of the patients. The importance of Rasaushadhi can be highlighted as follows:

- 1. By achieving Purushartha Chatushtya
- 2. Treatment
- 3. Shelflife
- 4. Legal aspect

1. By achieving Purushartha Chatushtya

धर्मार्थकाममोक्षाणाम् आरोग्यमूलमूत्तमम्।। (Cha.Su.1/14)

आयतनं विद्यानां मूलं धर्मार्थकाममोक्षाणाम्। श्रेयः परं किमन्यत् शरीरमजरामरं विहायैकम्॥

(R.H.T.1/27)

Ancient Indian literature and epics like Ramayana, Mahabharata and Dharmashastra stated the pursuit of four goals or ends for happy life which should be followed by each human being. *Dharma, Artha, Kama* and *Moksha* are four *Purushartha Chatushtya*. These four objects are very well fulfilled by *Rasa Chikitsa*.

मुक्त्वैकं रसवैद्यं तु लाभं पूजां च कीर्तनम्। तृणकाष्ठौषधैवैद्यः को लभेत वराटिकाम्॥

(A.P.1/14)

Only *Rasavaidya* acquires the prominence, wealth and divinity.

2. Treatment

अल्पमात्रोपयोगित्वाद अरुचेरप्रसंगतः। क्षिप्रमारोग्यदायित्वादौषधेभ्योऽधिकोरसः॥

(R.R.S.28/1, R.S.S.1/4)

Rasaushadhi are used in Alpamatra (small doses); Arucheruprasangatah (has no taste) and Kshipramarogyadayitvat (fast acting). Due to different processes like Shodhana, Marana, Samskara etc, the material converts into Nano form which makes quick assimilation in small doses in the body. Due to its tasteless property, the patient can overcome the unpleasant taste of herbal drugs by using it. It gives quick result when compared to herbal drugs.

स्वल्पा हि मात्रा विपुलो गुणश्च सद्यो हि तत्पाचनदीपनञ्च। यस्यास्ति तं चेन्न भजन्ति मर्त्यास्ते पूर्वजन्मार्जितपापमूढाः॥

(R.Chu.1/33)

This verse also indicates that *Rasaushadhi* are effective in fewer doses and having *Deepana* – *Pachana* property. If anyone consumes this, they will be free from the pre-birth deeds.

न दोषाणां न दूष्याणां न च पुंसां परीक्षणम्। न देशस्य न कालस्य कार्यारसचिकित्सकैः॥

(B.R. Jvara Chikitsa 5/479)

This stanza shows the mode of action of *Rasaushadhi* in cellular level. There is no need to go through the details of *Dosha*, *Dushya*, *Rogipariksha*, *Desha* and *Kala* while prescribing *Rasaushadhi*. It absorbs easily in the body. It enters into the blood stream and become more bio-compatible as compared to



herbal medicines due to nano level particles of medicine. In present era, it has developed a new concept in nano-medicine system due to its nano particles size. Through, the astonishing potency and effectiveness of *Rasau-shadhi*, it can be used in curable as well as incurable diseases. However, some scholars opine that this stanza is suitable to specific class of *Rasaushadhi* not for all.

मृतानि लोहानि रसीभवन्ति युक्तानि घ्नन्तिमहामयांञ्च। अभ्यासयोगाद् दृढदेहसिद्धिकुर्वन्ति-रुक्जन्मजराविनाशम् ॥ (R.R.S.5/142)

Acharya mentioned Rasibhavana state for Loha (metals and minerals) which are converted into absorbable form i.e. organometallic compound form by applying various techniques such as purification, incineration etc. Research has proved that Rasaushadhi are transformed in the nano particles form since their absorption is only possible in nano particle form by our body fluids. So bio availability of mercurial compounds is enhanced through assimilation in the Rasa (nutrient fluid).

Characterization of Bio-active Nanoparticles – Bhasma an Ayurvedic Drug

Sr.No.	Formulations	Particle size analysis
1.	Yashada Bhasma	100 to 500 nm
2.	Tamra Bhasma	900 nm
3.	Svarna Makshika Bhasma	931.4 nm

This table reveals the presence of nano size particles in the *Rasa* formulations.

साध्येषु भेषजं सर्वमीरितमतत्ववेदिना। असाध्येष्वपिदातव्योरसोऽतः श्रेष्ठ उच्यते॥

(R.S.S.1/5)

Herbal medicines can be prescribed only in curable diseases but mercurial preparations can be prescribed even in incurable diseases. Therefore *Rasa Chikitsa* is the best among all treatments.

सर्वशास्त्र अर्थतत्वज्ञो न जानाति रसं यदा। सर्वतस्य उपहासाय धर्महीनो यथाबुधः॥

(B.R. Jvara Chikitsa 5/480)

If *Vaidya* does not have the knowledge of Rasashastra, he is ridiculed by others like the one who are not performing virtuous deeds. Rasashastra is creditable among all sciences because of its spiritual and therapeutic importance.

यथा न रोचतेकिञ्चिद् व्यञ्जनं लवणै र्विना। रसशास्त्रं विना तद्वत्सर्वशास्त्रं न रोचते॥

(R.Chi.9/3)

Just as, food is tasteless without salt; there is no meaning of science without the knowledge of Rasashastra.

3. Shelf life

The shelf life of *Rasaushadhi* has been described for infinite period in our classics (Sha.Sam.Pu.Kh.1/54-56). On shelf life of *Rasaushadhi*, in Gazatte notification, G.S.R. 789(E)] has been issued by Government of India on 12th August, 2016 for revising shelf life of ASU Drugs, the shelf life or the date of expiry of *Rasaushadhi* defined under clause (a) of section 3 of the Act shall be determined on the basis of scientific data as 5 years and 10 years.

4. Legal aspect

Every science has pros and cons. Like that though *Rasaushadhi* has miracle power in curing the diseases, some problems are encountered in the preparation and therapeutic indications as follows: